FIG. 1

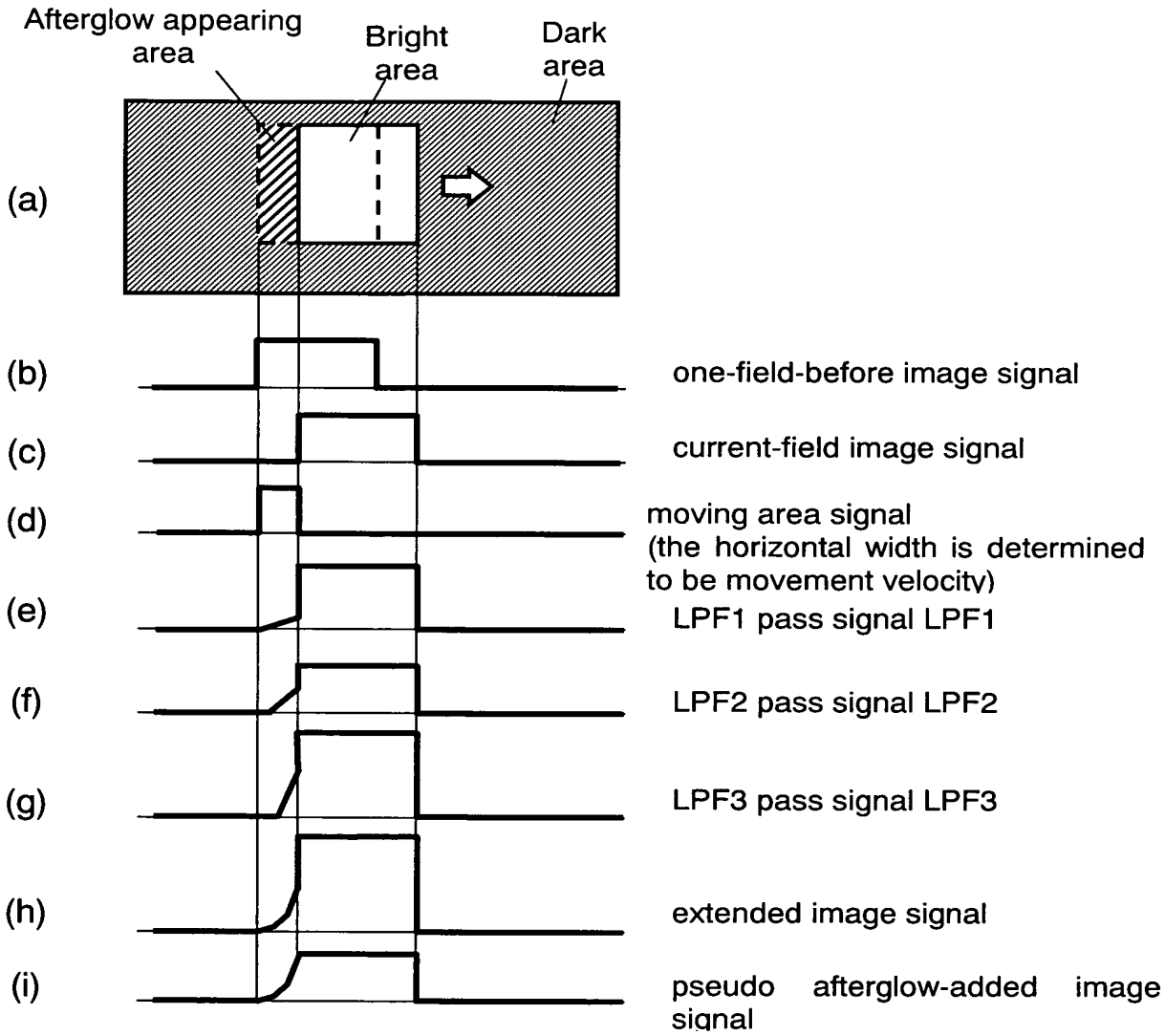
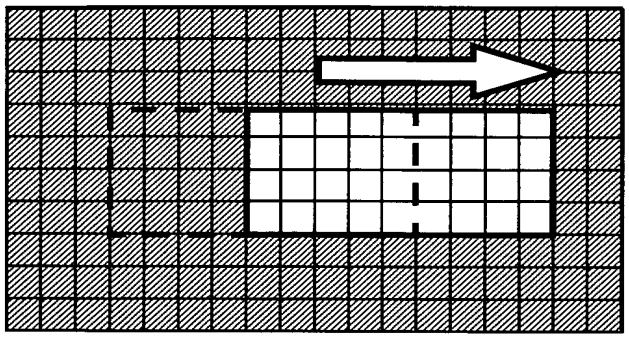

Afterglow appearing area
Bright area
Dark area
(a)
(b)
one-field-before image signal
(c)
current-field image signal
(d)
moving area signal
(the horizontal width is determined to be movement velocity)
(e)
LPF1 pass signal LPF1
(f)
LPF2 pass signal LPF2
(g)
LPF3 pass signal LPF3
(h)
extended image signal
(i)
pseudo afterglow-added image signal

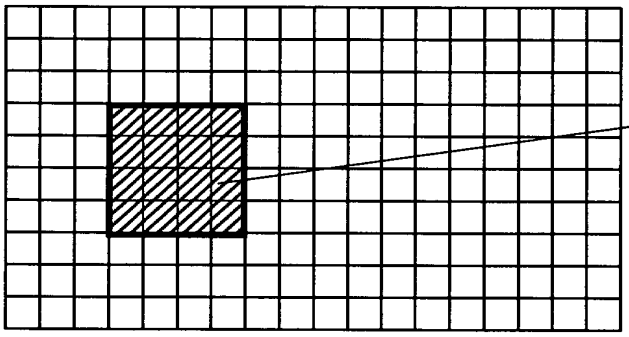
FIG. 2

(a)



gray levels in the bright area=100
gray levels in the dark area=0

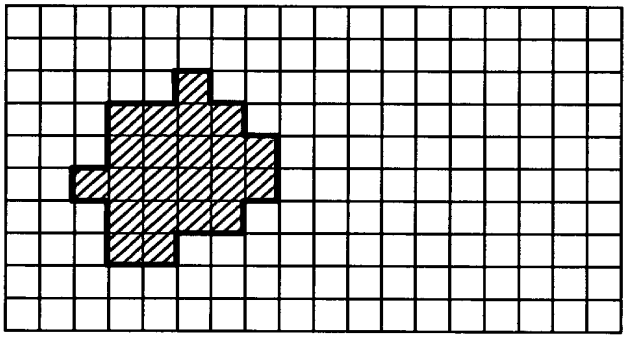
(b)



(c)

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(d)



(e)

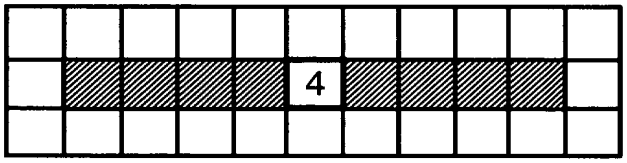
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
0	0	0	5	5	5	5	5	0	0	0	0	0	0	0	0	0	0
0	0	6	6	6	6	6	6	0	0	0	0	0	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0	0	0	0	0	0	0
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FIG. 3

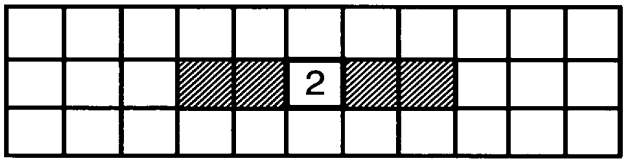
movement velocity	tap values
0	0
1	1
2,3,4	4
5,6,7	8
8 ~	16

FIG. 4

(a)



(b)



(c)

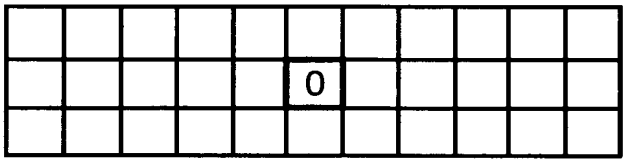


FIG. 5

(a) image signal

0	0	0	0	0	0	0	100	100	100	100	100
0	0	0	0	0	0	0	100	100	100	100	100
0	0	0	0	0	0	0	100	100	100	100	100
0	0	0	0	0	0	0	100	100	100	100	100

(b) tap value

0	0	0	4	4	4	4	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0
0	0	0	4	4	4	4	0	0	0	0	0

(c) LPF1

tap value x 1
current-field
image signal x 0.5

0	0	0	6	12	18	25	50	50	50	50	50
0	0	0	6	12	18	25	50	50	50	50	50
0	0	0	6	12	18	25	50	50	50	50	50
0	0	0	6	12	18	25	50	50	50	50	50

(d) LPF2

tap value x 0.5
current-field
image signal x 1

0	0	0	0	0	25	50	100	100	100	100	100
0	0	0	0	0	25	50	100	100	100	100	100
0	0	0	0	0	25	50	100	100	100	100	100
0	0	0	0	0	25	50	100	100	100	100	100

(e) LPF3

tap value x 0.25
current-field
image signal x 2

0	0	0	0	0	0	100	200	200	200	200	200
0	0	0	0	0	0	100	200	200	200	200	200
0	0	0	0	0	0	100	200	200	200	200	200
0	0	0	0	0	0	100	200	200	200	200	200

(f) extended image signal

0	0	0	6	12	25	100	200	200	200	200	200
0	0	0	6	12	25	100	200	200	200	200	200
0	0	0	6	12	25	100	200	200	200	200	200
0	0	0	6	12	25	100	200	200	200	200	200

FIG. 6

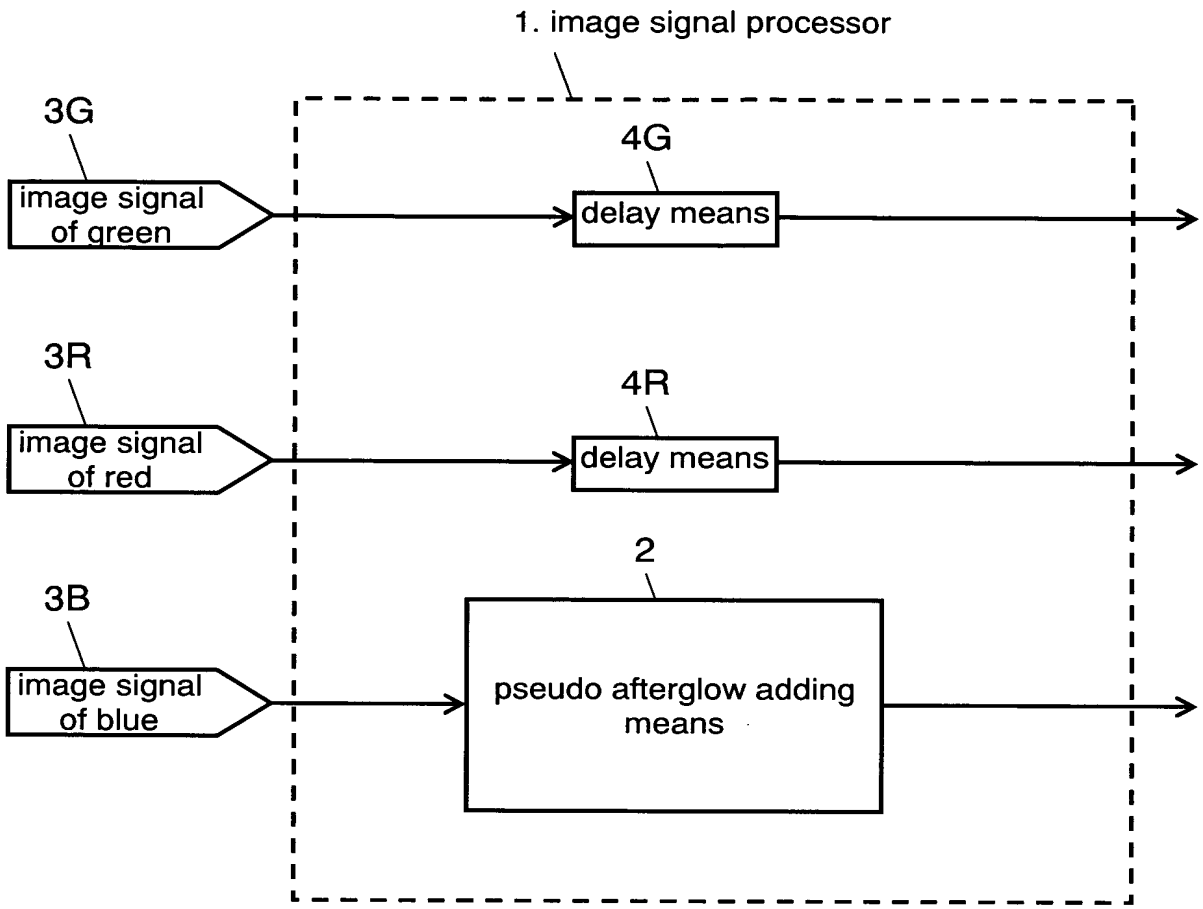

1. image signal processor
3G
image signal of green
4G
delay means
3R
image signal of red
4R
delay means
3B
image signal of blue
2
pseudo afterglow adding means

FIG. 7

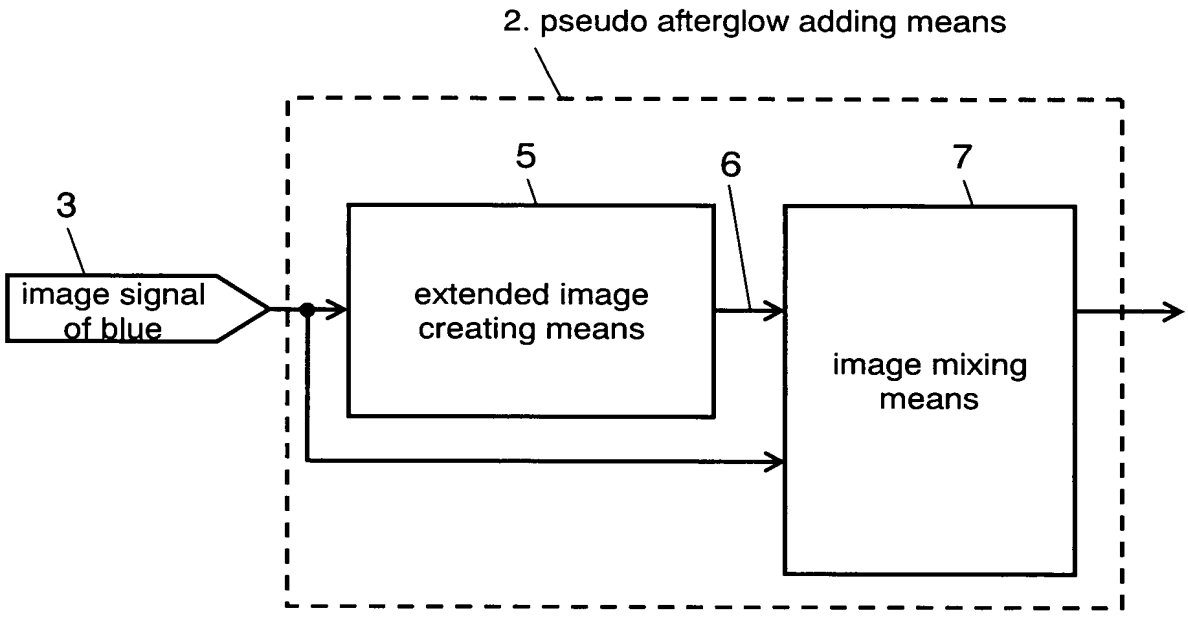

2. pseudo afterglow adding means
3
image signal of blue
5
extended image creating means
6
7
image mixing means

FIG. 8

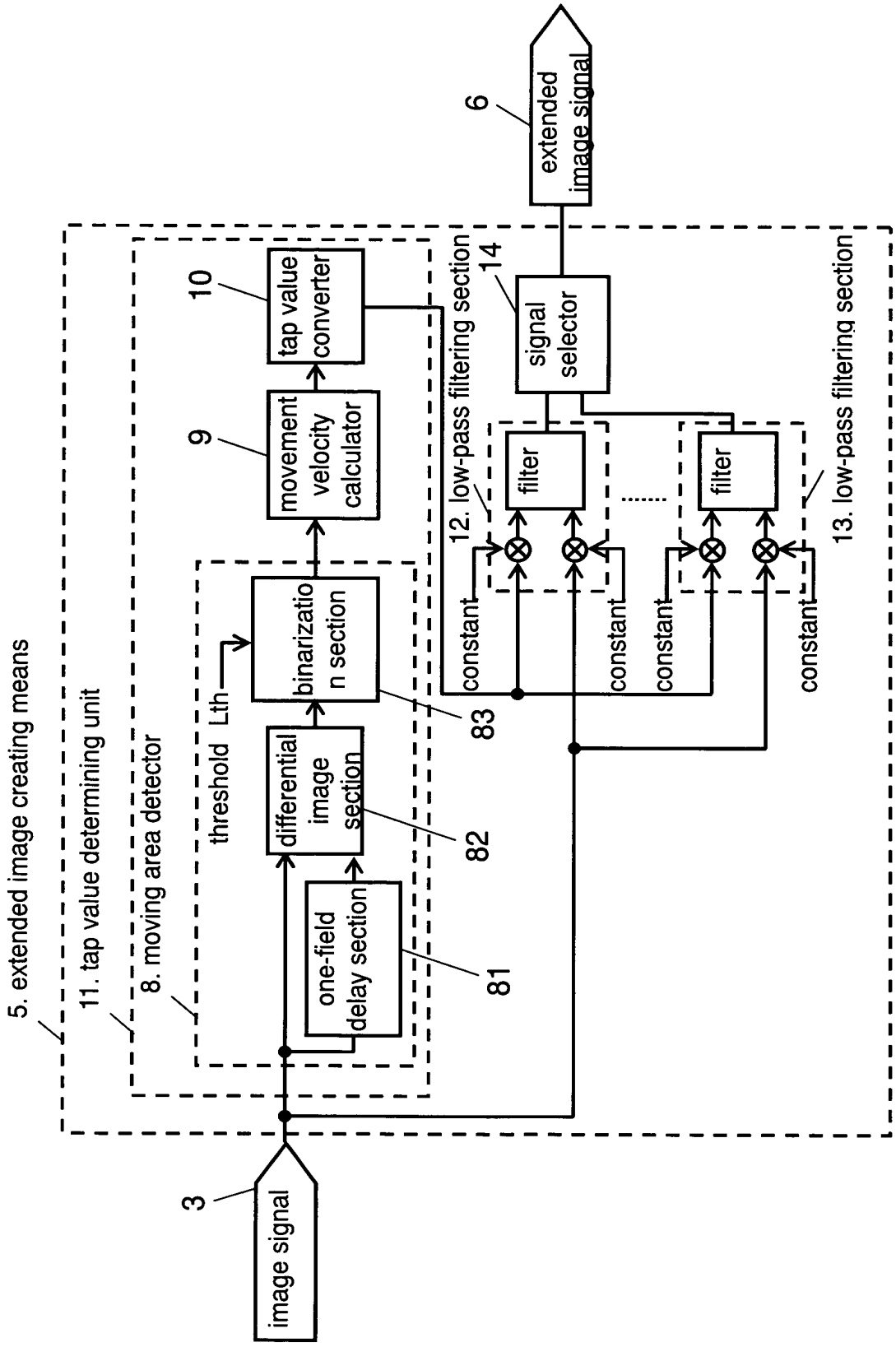

5. extended image creating means
11. tap value determining unit
8. moving area detector
threshold Lth
3
image signal
one-field delay section
81
differential image section
82
binarizatio n section
83
movement velocity calculator
9
tap value converter
10
12. low-pass filtering section
constant
filter
constant
filter
constant
13. low-pass filtering section
constant
14
signal selector
6
extended image signal

FIG. 9

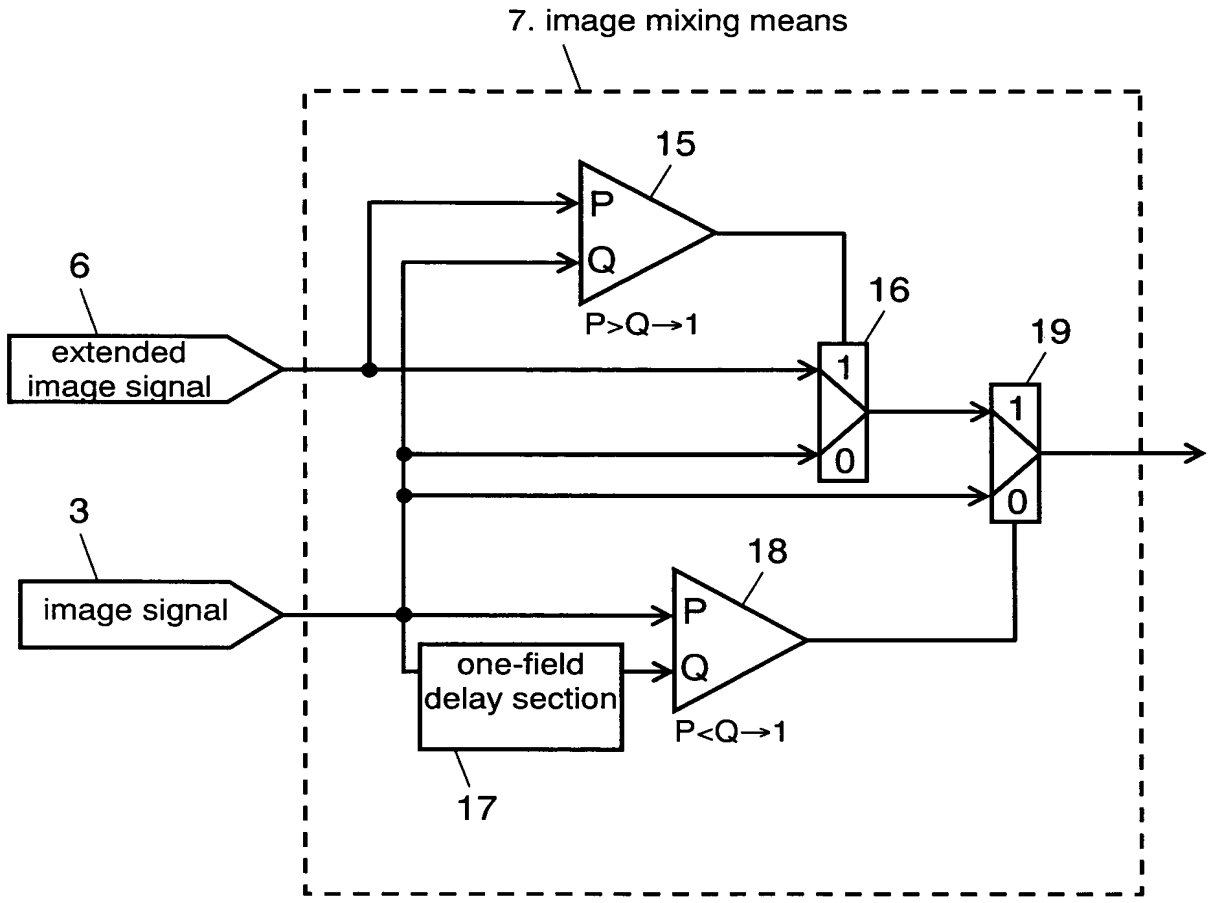
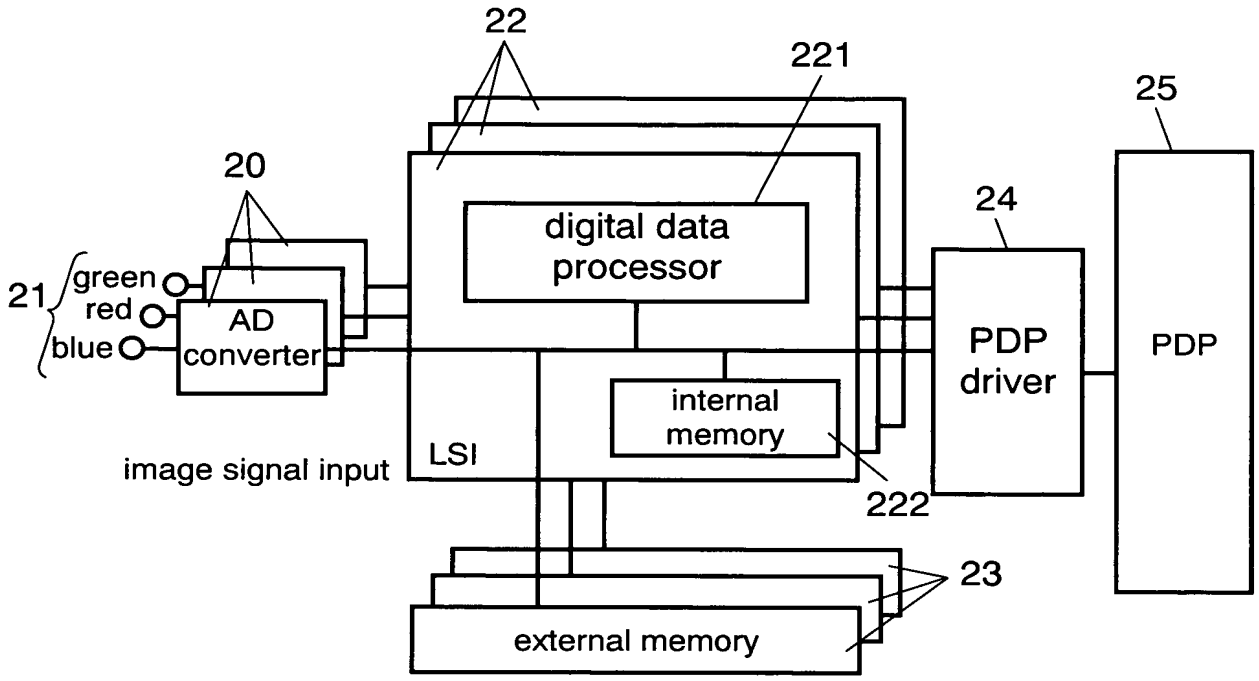

7. image mixing means
15
P
Q
P>Q→1
6
extended image signal
16
1
0
19
1
0
3
image signal
18
P
Q
one-field delay section
P<Q→1
17

FIG. 10


22
221
25
20
24
digital data processor
21
green
red
blue
AD converter
PDP driver
PDP
internal memory
image signal input
LSI
222
23
external memory

[Reference marks in the drawings]

1: image signal processor
2: pseudo afterglow adding means
3, 3G, 3R, 3B: image signal
4G, 4R: delay means
5: extended image creating means
6: extended image signal
7: image mixing means
8: moving area detector
9: movement velocity calculator
10: tap value converter
11: tap value determining unit
12, 13: low-pass filtering section
14: signal selector
81: one-field delay section
82: differential image section
83: binarization section